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REMARKS

This communication is in response to the Advisory Action mailed on September 22, 2004. It is also noted that Applicants' attorney, Ms. Linda P. Ji, discussed the present application with the examiner, Mr. Jeremy Pierce, on or around September 30, 2004. At that time, it was made known that applicants had agreed to cancel independent claims 84 and 106 and pending dependent claims depending on claims 84 and 106. Therefore, with this amendment, claims 84-87, 89-92, and 106-111 have been cancelled.

Also, during the telephone conversation the status of claims 113-115, which had been submitted in the amendment filed on September 3, 2004 but not entered, were discussed. The Examiner stated that new claims 113-115, which depend on allowed claim 104 would be entered as long as at least an equivalent number of claims were cancelled. With this amendment, claims 113-115 are again submitted for favorable action. Claim 116 is also new and recites a glove comprising the fabric assembly of claim 104. It is believed that use of the present fabrics in gloves has been supported in the specification and presents no new matter. Applicants respectfully solicit favorable action with respect to claim 116.

During the telephone conversation, it was made known that the Applicants desire to focus Examiner's attention on resolving outstanding issues with respect to claims 100-103.

The final Office Action mailed on May 3, 2004 had reported that claims 100-103 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement because claim 100 recited "each substrate is capable of movement relative to the other substrates" but support for this limitation was not found in the specification. This feature had been added in the amendment filed on November

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25, 2003 and has now been removed. As discussed below, claim 100 has been amended with other limitations unrelated to the objected to feature of relative movement of substrates.

The final Office Action also reported that claim 100 was rejected under 35 U.S.C. §103 as being unpatentable over WO 93/21492 to Patchett ("Patchett") in view of U.S. Patent No. 5,953,751 to Kobren ("Kobren") and in further view of U.S. Patent No. 5,601,895 to Cunningham ("Cunningham"). Patchett discloses body armor having a plurality of inter-linking plates in a jigsaw pattern. Kobren discloses a needlestick resistant glove for medical or surgical purposes having a plurality of plates generally corresponding to portions of the hand and fingers. Cunningham discloses a puncture resistant fabric that can be used for medical purposes where the fabric comprises a plurality of embedded plates.

Claim 100 has been amended and recites a non-ballistic fabric assembly comprising a first flexible substrate having a first plurality of continuous, non-overlapping plates, each having a bottom surface affixed to a top surface of the first flexible substrate, a second flexible substrate having a second plurality of continuous, non-overlapping plates, each having a bottom surface affixed to a top surface of the second flexible substrate, and a third flexible substrate having a third plurality of continuous, non-overlapping plates, each having a bottom surface affixed to a top surface of the third flexible substrate, wherein the flexible substrates are arranged in a stack, wherein each plurality of plates is arrayed in a pattern such that a plurality of approximately linear gaps are defined between adjacent affixed plates, wherein each gap is approximately uniform in width in the range of about 5 mils to 20 mils, and wherein each plate has an approximately uniform thickness in the range of 5 to 20 mils. [emphasis added]

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Importantly, claim 100 has been amended with respect to Patchett so that it relates to a "non-ballistic" fabric assembly. Thus, it is believed that Patchett is intended to include ballistic strength material for military, police, and/or security purposes that is also puncture-resistant, e.g. to knives. It is noted that the Advisory Action argues that Patchett teaches diverse uses and varying thickness to improve flexibility. However, it is submitted that Patchett refers generally to ballistic strength materials. It is submitted that it is simply not reasonable to infer that Patchett can be used for any purpose and have plates of any thickness, including the ultra-thin thickness' recited in claim 100. To do so would be giving Patchett an overly broad reading. Also, it is believed that Patchett nowhere teaches or suggests that its fabric is non-ballistic. It is true that Patchett does mention being resistant to puncture, such as from knives. However, it is believed that the stab resistance capability is intended to be in addition to, rather than instead of, its ballistic capability. Thus, it is respectfully requested that Patchett be removed as a reference against claim 100.

Also, it is submitted that Patchett does not teach, or suggest all of the features of claim 100. For example, it is submitted that Patchett does not teach or suggest a fabric assembly having the combination of linear gaps, narrow gap width, and ultra-thin plate thickness' that are included in claim 100. For example, the recited plate thickness range (5 to 20 mils) is extremely thin and is believed to be unsuitable for ballistic strength body armor. Thus, it is believed that Patchett cannot be modified (and does not suggest being modified) with the features of claim 100 because it would largely lose its intended function as ballistic strength body armor for military, police, and other security purposes. [See page 1, lines 10-13]

Also, it is believed that Patchett actually teaches using relatively thick plates, and thus, teaches away from the

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extremely thin plates of claim 100. For example, Patchett provides at page 2, lines 18-20 that, "Surprising, the sheet material can be very flexible even when the layer of relatively rigid plates is quite thick." Thus, it is believed that ideally Patchett is thick enough to have ballistic strength and stab-resistance, and thin enough to provide flexibility to the wearer (but still not ultra-thin as in claim 1). In light of the foregoing, it is believed that claim 100 is patentable over Patchett.

Kobren was recited as disclosing a surgical glove having very thin plates in the range of 0.01 to 0.2 mm thick. Kobren illustrates plates attached to a glove through stems such as in the form of a mushroom. In contrast, claim 100 includes three pluralities of plates, where each plate has "...a bottom surface affixed to a top surface..." of a substrate. Thus, the bottom surfaces of Kobren are not affixed to the substrate surface but instead move freely and relative to their corresponding substrates. Thus, it is respectfully submitted that Kobren does not teach, or suggest the three layer structure of claim 100, where the plates each have "a bottom surface affixed to a top surface" as recited in claim 100. Also, Kobren does not have approximately linear gaps between plates because the plates are curved to fit portions of the hand and fingers. Thus, it is believed that claim 100 is patentable over Kobren.

Finally, Cunningham was cited as teaching plates that have a hexagonal shape. It is noted that Cunningham includes plates that are encapsulated in an elastomeric substrate 22. Therefore, Cunningham does not teach or suggest a plurality of plates "each having a bottom surface affixed to a top surface" of a substrate as recited in claim 100. Therefore, it is respectfully submitted that claim 100 is patentable over Cunningham.

In light of the foregoing, it is believed that claim 100 is patentable over the cited art. Claims 101-103 depend on claim 100 and are believed to be separately patentable. Claim 117

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is new and depends on claim 100. Claim 117 recites a glove comprising the non-ballistic fabric assembly of claim 100 and is similar to new claim 116. Favorable action on claims 100-103, and 117 are respectfully requested.

Finally, claim 118 is new and is nearly identical to claim 100 as submitted in the amendment filed on September 3, 2004 (but not entered). Claim 118 recites a fabric assembly comprising a first flexible substrate having a first plurality of continuous, non-overlapping plates affixed to a top surface of the first flexible substrate, a second flexible substrate having a second plurality of continuous, non-overlapping plates affixed to a top surface of the second flexible substrate, and a third flexible substrate having a third plurality of continuous, non-overlapping plates affixed to a top surface of the third flexible substrate, wherein the flexible substrates are arranged in a stack, wherein each plurality of plates is arrayed in a pattern such that a plurality of approximately linear gaps are defined between adjacent affixed plates, wherein each substrate is spot bonded to another substrate in at least one position, wherein each gap is approximately uniform in width in the range of about 5 mils to 20 mils, and wherein each plate has an approximately uniform thickness in the range of 5 to 20 mils.

In the September 30 conversation, the Examiner opined that he would consider an additional feature such as spot bonding instead of substrates "capable of movement relative to the other substrates" that was included in claim 100 in the September 3, 2004 amendment. Thus, the feature of relative movement has been removed in new claim 118. In place, claim 118 includes the additional feature of "each substrate is spot bonded to another substrate in at least one position". It is believed that both spot bonding (with a comparison to continuous bonding) has been disclosed in the specification as originally filed. Remarks as to claim 100 and the remarks filed on September 3, 2004 are

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incorporated herein. Therefore it is believed that claim 118 is patentable over the cited art. Claims 119-121 depend on claim 118 and generally contain the subject matter of claims 101-103 above. Favorable action as to claims 118-121 is respectfully requested.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

WESTMAN, CHAMPLIN & KELLY, P.A.

By: *Linda P. Ji*

Linda P. Ji, Reg. No. 49,027
Suite 1600 - International Centre
900 Second Avenue South
Minneapolis, Minnesota 55402-3319
Phone: (612) 334-3222 Fax: (612) 334-3312

LPJ:lms